

IN THE CLAIMS:

Please amend Claims 1, 3, 4, 5 and 75 as shown below. Please cancel Claim 2 without prejudice or disclaimer of subject matter. The claims, as currently pending in the application, read as follows:

1. (Currently Amended) User interface apparatus for providing user interfaces corresponding to each of a plurality of different kinds of devices, said user interface apparatus comprising:

a data requestor operable to request device description data of a desired device of said plurality of different kinds of devices, the device description data describing a plurality of functions that the desired device is capable of carrying out;

a receiver operable to receive the device description data of the desired device from the desired device via a network;

an associator operable to associate the plurality of functions described in the received device description data with candidates [[for]] of user interface elements, wherein said associator associates each of the functions with one or a plurality of candidates of user interface elements;

a preference provider operable to provide pre-stored preference data regarding user interface element preferences;

a selector operable to select a candidate of each function from the plurality of associated candidates by filtering the candidates based on the pre-stored preference data and the sizes of the candidates;

a generator operable to generate a user interface for the desired device by laying out the candidates of the user interface elements using the selected candidates ~~candidate user interface elements associated with the described functions by said associator~~, wherein the generator is common to said plurality of different kinds of devices and is operable to generate a user interface for any of said plurality of kinds of devices; and

a communicator operable to communicate with the desired device to cause the desired device to carry out a function selected by a user using the user interface generated by said generator.

2. (Cancelled).

3. (Currently Amended) User interface apparatus according to claim 1 [[2]], wherein the preference provider is operable to provide preference data defining preferences of at least one of the user of the user interface apparatus and the supplier of the user interface apparatus.

4. (Currently Amended) User interface apparatus according to claim 1 [[2]], wherein the preference provider is operable to provide preference data defining at least one of preferences for different types of user interface elements, [[:]] preferences for the style of presentation of user interface elements and preferences for layout of user interface elements.

5. (Currently Amended) User interface apparatus according to claim 1, wherein the preference provider is operable to provide preference data defining at least one of preferences for different types of user interface elements and user interface element style preferences to be used for user interface elements.

6. (Original) User interface apparatus according to claim 1, wherein the user interface comprises a graphical user interface and the apparatus further comprises a display for displaying the user interface to a user.

7. (Cancelled).

8. (Cancelled).

9. (Previously Presented) User interface apparatus according to claim 1, wherein the data requestor is operable to communicate directly with the desired device.

10. (Previously Presented) User interface apparatus according to claim 1, wherein the data requestor is operable to communicate with the desired device via a network to which the desired device is coupled.

11. (Cancelled).

12. (Previously Presented) User interface apparatus according to claim 1, wherein the receiver is operable to receive the device description data directly from the desired device.

13. (Previously Presented) User interface apparatus according to claim 1, wherein the receiver is operable to receive the device description data using a look-up service provided by a network to which the desired device is coupled.

14. (Previously Presented) User interface apparatus according to claim 1, wherein the user interface apparatus includes a processor and associated memory storing a user interface application implementable by the processor.

15. (Previously Presented) User interface apparatus according to claim 14, wherein the user interface application comprises a plurality of separate program modules.

16. (Previously Presented) User interface apparatus according to claim 15, wherein said data requestor, said communicator, said receiver, said associator, and said generator comprise respective different ones of the program modules.

17. (Cancelled).

18. (Previously Presented) A combination comprising a user interface apparatus in accordance with claim 1 and a device, the device having:

a functioner for carrying out at least one function;

a wireless machine communicator for communicating wirelessly with the user interface apparatus to enable a user of the user interface to cause the device to carry out a function; and

a device description provider for providing to the user interface apparatus upon request by said data requestor the device description data describing all of the functions that the device is capable of carrying out.

19. (Previously Presented) A combination according to claim 18, wherein the functioner is operable to carry out a printing function.

20. (Previously Presented) A combination according to claim 18, wherein the functioner is operable to carry out a facsimile communication function.

21. (Previously Presented) A combination according to claim 18, wherein the functioner is operable to carry out a copying function.

22. (Previously Presented) A combination according to claim 18, wherein the functioner is operable to carry out a scanning function.

23 to 51. (Cancelled).

52. (Previously Presented) A user interface apparatus according to claim 1, further comprising:

a user-settable data handling parameter definer having at least one parameter settable by a user; and

a data handler operable to handle received data in accordance with at least one data handling parameter set by the user.

53. (Previously Presented) A user interface apparatus according to claim 52, wherein the data handler is operable to divert an incoming message so that the user is not made aware of the message.

54. (Previously Presented) A user interface apparatus according to claim 52, wherein the data handler is operable to send received data to a location determined by at least one parameter set by the user.

55 to 57. (Cancelled).

58. (Previously Presented) A user interface apparatus according to claim 1, further comprising:

a user interface modifier operable to modify the user interface in response to data identifying the availability of another device.

59. (Previously Presented) A user interface apparatus according to claim 58, wherein the user interface modifier is operable to make available a copy or print user interface function in response to data identifying the availability of a printer.

60. (Cancelled).

61. (Previously Presented) A storage medium storing processor implementable instructions for causing a processor to become configured as a user interface apparatus in accordance with claim 1.

62 to 68. (Cancelled).

69. (Previously Presented) User interface apparatus according to claim 1, further comprising:

a network communicator operable to determine whether another device, that in combination with said desired device provides a further function not otherwise provided by said desired device, is coupled to the network; and

a user interface controller operable to control the user interface for said desired device in accordance with whether or not said other device is coupled to the network so as to indicate to the user that said further function is not available when said other device is not coupled to the network and to indicate to the user that said further function is available when said other device is coupled to the network.

70. (Cancelled).

71. (Previously Presented) User interface apparatus according to claim 5, wherein the preference provider is operable to provide preference data defining preferences for at least one of button, menu or combo box type user interface elements and at least one of color, font and font size user interface element styles to be used for user interface elements.

72. (Cancelled).

73. (Previously Presented) User interface apparatus according to claim 1, wherein said associator is operable to retrieve a default layout including a plurality of different panes, and to associate the functions corresponding to each pane of the default layout with candidates of user interface elements, and wherein said generator is operable to generate a user interface of the desired device by laying out the candidates of the user interface elements associated with the functions by said associator.

74. (Previously Presented) User interface apparatus according to claim 1, wherein the device description data is described by XML.

75. (Currently Amended) User interface method for providing user interfaces corresponding to each of a plurality of different kinds of devices, said user interface method comprising the steps of:



storing preference data regarding user interface element preferences;

requesting device description data of a desired device from amongst said plurality of kinds of devices, the device description data describing a plurality of functions that the desired device is capable of carrying out;

receiving the device description data of the desired device from the desired device via a network;

associating the plurality of functions described in the received device description data with candidates [[for]] of user interface elements, wherein each of the functions is associated with one or a plurality of candidates of user interface elements;

selecting a candidate of each function from the plurality of associated candidates by filtering the candidates based on the stored preference data and the sizes of the candidates;

generating a user interface for the desired device by laying out the candidates of the user interface elements using the selected candidates; candidate user interface elements associated with the described functions by said associating step; and

communicating with the desired device to cause the desired device to carry out a function selected by a user using the user interface generated by said generating step, wherein said generating step can generate a user interface for any of said plurality of different kinds of devices.